

















distress in South Dakota. He has just returned to Chicago and reports that the situation among the farmers in that State is very gloomy. Campbell, Waworth, Edmunds, Potter, Brown, Spink, Hyde, Hand, Headie, Clark, Knapp, Miner, Davison, Zantbar, Gerdahl, Park, Hughes and Sully. Crops in the country have been failures for three successive years, and many once prosperous farmers are reduced to beggary. Farms are mortgaged for their full value, most of the stock has been sold by the sheriff to pay debts incurred for necessities. The railroads have provided many with coal, gratuitously, but food and clothing are badly needed.

Foreign.

The Rothschilds decline to float the new loan desired by the Russian government. The Duke of Aosta, brother of Humbert, king of Italy, was buried at Turin on the 22nd.

The treaty between the United States and Germany on Samoa affairs has been made public, and is quite satisfactory to our government. Tippecanoe is said by a French explorer to be the actual master of Africa, having much more influence than the Sultan of Zanzibar. Tippecanoe does not like the English.

Emperor William will be 35 years old on the 27th inst. In consequence the court mourning for the recently deceased dowager-Empress will be suspended for 31 hours.

Percherons for Sale.

Pure bred and high grade STALLIONS AND MARES of desirable age, choice breeding, and individual excellence. The largest herd in this part of the State. A large number of the best of the 125 (300) and 100 (200) season to Water 2 (200) and Marquis 18. Matched pairs a specialty. Also elegant pair of black and white Southland Ponies, one and two years old. Will sell together or singly. Prices very low. Come and see me or write for further information.

E. WOODMAN, Paw Paw, Mich.

WANTED.

A partner with about \$5,000 to invest in a well established ranch in Nebraska.

E. M. MICHIGAN FARMER OFFICE.

Situation Wanted

on a stock farm, by a married man, without children. Has had long experience in handling cattle and horses. Address:

G. L. CARE OF MICHIGAN FARMER.

WANTED.

Percheron stallion—imported or home bred. Low down with lots of bone and action; color, black; weight, 19 to 23 hundred. Would also pay a few good mares stock raised by farmers preferred.

H. H. CHILDS, Rockford, Mich.

FOR SALE.

TEN CHOICE REGISTERED HOLSTEIN COWS. Will sell cheap for cash or approved paper. Correspondence will receive prompt attention.

E. M. LEWIS, RAISINGVILLE, MICH.

FOR SALE.

SHORTHORN BULLS. Sired by Lord Kirklington of Erie 4482. 15 to 18 months old. These are fine individuals and will be sold cheap.

JOHN P. SANBORN, Port Huron, Mich.

YOUNG STOCK FOR SALE

OF BOTH SEXES. Pairs not sold can be furnished. Also some choice young sows for sale, bred farrow in April. Stock all from the most popular families, and prices very reasonable. Address:

A. A. WOOD, SALINE, MICH.

Black Percheron Stallion

For sale at a reasonable price. Coming three years old, with style action and quality without blemish. Weight now about 1,600 lbs. Sire and dam both prize winners and owned by us. Also a very fine coach style Percheron stallion and young stock of both sexes. Inspection invited. Correspondence will receive prompt attention.

PARSONS & BALDWIN, Watervliet, Mich.

Black Meadow Farm,

STANDARD-BRED TROTTERS, BATES-BRED SHORTHORNS, BERKSHIRE FIGS!

The high-bred trotting stallion Teusha Grondie 5001, will make the season of 1890 at Black Meadow Farm, for \$25.00 by the season, without return privileges. Teusha Grondie was sired by Spartacus 1013, dam by Belmont 64; G. J. Ditch (dam of Spartacus) by Manhattan City; G. J. Ditch by Almont 33; dam Queen Lizzie (dam of Spartacus) by Manhattan City; G. J. Ditch by Almont 33; dam Queen Lizzie (dam of Spartacus) by Manhattan City; G. J. Ditch by Almont 33; dam Queen Lizzie (dam of Spartacus) by Manhattan City.

F. A. BAKER, 60 Buhl Block, Detroit, Mich.

A Chance to Secure a Prize!

Exile of St. Lambert 12. A magnificent son of the Great Exile of St. Lambert. Dam Pansy Littlefield, 15 lbs. 14 oz. in seven days. Color, light brown, dappled July 19th, 1887. Will be sold cheap or will exchange for registered Berkshire swine. Address:

WILLIAM H. ELLIOTT, Detroit, Mich.

HEREFORDS!

I have a few choice young Bulls and Heifers for Sale OF PURE BREEDING. Prices reasonable. Catalogue furnished on application. Call upon or address:

WM. STEELE, Ionia, Mich.

Shorthorn Bulls for Sale

Sired by Grand Duke of Farnham 3073, and Lord Ragsdale 6361, out of Young Mary, Phyllis, Lady Blithedale, Port Duquesne and Rose of Sharon cows. Also a few cows and heifers. Reliable catalogues always on hand for distribution.

WM. CURTIS & SONS, Addison, Lenawee Co., Mich.

For Sale Very Cheap.

One seven-elfths Percheron Stallion, six years old, sired by Woodman's Duke, dam by Moro, grand dam by a pure bred Percheron. Can show some good stock from him. Also a number of good horses. Address

E. E. DARLING, Paw Paw, Mich.

PERCHERON HORSES AT BARGAINS!

We mean exactly what we say. We have 146 Head Imported and Pure Bred Stallions and Mares, 6 French Coach Horses, 30 Head of Grade Stallions and Mares, 20 Shire and Exmoor Ponies, and 27 Registered Holstein Cattle, all to be disposed of during this season, owing to changes in our business. If you think of buying write us describing what you want for our Catalogue and Prices, and we will convince you that it will pay you well to buy of us.

Island Home Stock Farm. SAVAGE & FARNUM, Detroit, Mich.

T. W. PALMER'S LOG CABIN STOCK FARM!

150 PERCHERONS. 100 JERSEYS. To be Disposed of this Season. For catalogues and particulars address

4 MERRILL BLOCK, Detroit, Mich.

FOR FIVE SUCCESSIVE YEARS

Galbraith Bros.' Horses have taken the leading position at Chicago, winning 107 of 107 prizes for City of States and 73 of 107 of the first prizes ever offered for English Shire Stallions two years old and over. This record is not equaled nor approached by any other Importers in America. 125 (stated) stallions in now on hand for sale in prices—our buying advantages being immeasurably superior to all others. We still make English Shires and Clydesdales a specialty, no have also a few choice Suffolk Punches and Cleveland Bays. Send for new 144 page catalogue.

Galbraith Brothers, Janesville, Wis.

Clydesdale Stallions for Sale Cheap.

A grand lot of YOUNG CLYDESDALE STALLIONS, coming three and four years old, will be sold at

LOW PRICES AND ON EASY TERMS, to make room for new crop. These horses were all bred by me, got by such imported

Young Wellington (1864) and Sir Arthur Ingram (1817)

and all out of registered imported Mares. Having been bred in Michigan they are all acclimated and ready for immediate service.

JAMES M. TURNER, Springdale Farm, Lansing, Mich.

TO PREPARE FOR A CHANGE IN MY BUSINESS!

I will offer my entire stock of 200 CLEVELAND BAY and SHIRE STALLIONS, Three and five years old, and 50 pure bred mares, sound, vigorous and fully acclimated, AT GREATLY REDUCED PRICES.

150 DEEP MILKING HOLSTEIN-FRIESIANS, At Correspondingly Low Prices.

Must Be Sold During the NEXT THREE MONTHS. An opportunity rarely offered to secure such high class stock at the prices and terms I am prepared to offer. Send for pamphlet giving full particulars.

GEO. E. BROWN, Aurora, Kane Co., Ill.

EUREKA PLACE STOCK FARM.

GREENVILLE, MONTCALM CO., MICH.

J. S. & W. G. CROSBY, PROPRIETORS.

—BREEDERS AND IMPORTERS OF—

Clydesdale, Shire and Cleveland Bay Horses, AND SHROPSHIRE SHEEP.

Shorthorn Cattle and Poland-China Hogs. Forty choice Shorthorn Ram Lambs, 12 Imported Rams, and Imported and Home-Bred Ewes for sale. Four Im out of 34 Shire Stallions, 20 Imported Clydesdale and one Imported Cleveland Bay for sale. All registered in both English and American Stock Books.

SHORTHORNS. A number of yearlings and bull calves for sale. Also stock bull Per's Oxford 4436. Prompt sale, time given correspondence.

For SALE, CHEAP.

ELM GROVE BREEDING FARM. One and one-half miles east of the City of Flint.

This farm, formerly occupied by Thos. Foster, contains 100 acres, is in the highest state of cultivation, having always been used as a stock farm; is all well tiled and drained and well fenced. The buildings are large and ample and in good repair.

WM. W. CRAPO, Proprietor.

For price and further particulars apply to Dr. JAS. C. WILLSON, or JOHN W. FOSTER, Flint, Mich.

J. P. SADLER, New York City.

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J. F. SADLER & CO.,

LIVE-STOCK COMMISSIONERS.

New York Central Stock Yards. EAST BUFFALO, N. Y.

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ST. CLAIR, MICH.

Bates and Bates Topped SHORTHORNS!

Represented by the following families: Duchesse, Kirklington, Victoria Duchesse, Craggs, Young Mary, Constance, and other high bred sires. At the head of the herd being the fine Duke bull

GRAND DUKE OF AIRDIRE 62933.

Young stock of both sexes for sale.

SHORT HORNS

FOR SALE. Bulls, heifers, cows and calves of choice milk strains and sired by high-bred bulls. For particulars address

B. J. BIDWELL, Tecumseh, Mich.

SPRINGBROOK FARM DELHI MILLS, MICH., Shorthorn Cattle

—AND— MERINO SHEEP!

The Shorthorn herd on this farm was never in better shape than at present.

Lord Hilpa 63417 and Imp. Barrington Barringtonia AT HEAD OF HERD!

Several Choice Young Bulls for Sale, Ready for Service this spring.

ALSO A FEW CHOICE FEMALES.

MERINO SHEEP.

Flock of over one hundred breeding ewes, yearlings and lambs of both sexes for sale. Visitors always welcome. If you cannot come and look over the stock write for particulars. Address

W. E. BOYDEN.

SELECT HERD

Bates Cattle!

—AT— HAZEL RIDGE FARM, SANDWICH, ONT.

The herd consists of

Duchesse, Kirklington, Wild Eyes and Red Rose Families.

Farm across the Detroit River. Immediately opposite the Exposition grounds. Call upon or address

WM. WRIGHT, Proprietor, 35 Fort Street West, Detroit.

"SHADELAND."

The most extensive and purest LIVE STOCK ESTABLISHMENT in the world.

New Importations constantly arriving, unequalled collections of superior quality. Choice breeding opportunity of comparing different breeds.

Breeders and Importers of Standard Bred Trotters, Carriage Horses, English Draughts, Welsh Ponies, Irish Draughts, French Coaches, Holstein-Friesian Cattle, Devon Cattle, and other breeds.

No other Establishment in the World offers such Advantages to the Purchaser. Prices low. Terms easy. Visitors welcome. Correspondence solicited.

POWELL BROTHERS, Springfield, Crawford Co., Pa.

DOOR PRAIRIE LIVE STOCK ASSOCIATION.

IMPORTERS AND BREEDERS OF Clydesdales and Cleveland Bays, ENGLISH VILLAGE, IND.

STYLE, ACTION AND QUALITY, combined with Good Pedigrees. Importations in Time and Out. Terms to suit Purchasers.

CALL AND SEE THEM.

FOR SALE.

Registered Jersey Bull, two years old, Bismark of Marshall 19216.

Sire Cal on a Lander 10618; dam Highland Girl 15922. A bargain. Address

E. J. KIRBY, MARSHALL, MICH.

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W. A. SNOW & SON, Kalamazoo, Mich., breeders of Shorthorn cattle. Principal families: Hutton, Young Mary, Polaris, etc., headed by the Bates bull Per Duke 34 8544. Young stock for sale. Correspondence promptly answered. Address

G. DUFFIE, Spring Lake, Mich., breeders of Shorthorn cattle, Merino Sheep and Poland China swine. All stock recorded. Stock for sale. Correspondence promptly answered. Address

S. ELLIWOOD, Rose Corners, P. O. Ad. dress Fenwickville, Genesee Co., Mich. Correspondence will receive prompt attention. Address

W. J. HARTWELL, East Saginaw, Mich., breeder of Shorthorn cattle. Stock of all ages for sale. Inspection of the herd invited. Correspondence promptly answered. Address

WILLIAM CREEK HERD OF SHORTHORNS. Stock of all ages for sale of good families and individual merit. Gwynne, Young Mary and Phyllis. Prices reasonable and to suit the times. O. R. Patterson, Plymouth, Mich.

W. M. HALL, Hamburg, Livingston Co., breeder of Shorthorn cattle. Principal families: Rose of Sharon, Young Mary, Young Phyllis and Crank. Also breeder of Shorthorn and American Merinos of the best blood as well as the most thoroughly practical.

W. W. WILSON, Wixom, Oakland Co., breeder of Shorthorn cattle of the Kirklington, Hutton, Flat Creek Mary, Crankhamk, Rose of Sharon, Aylesby Lady, Phyllis, Rosemary, Duane, Ruthland, Lady Helen and Victoria families, headed by the pure Bates Barrington bull Barrington Duke 7th No. 7267.

W. M. FISHER & SON, Howell, breeders of Shorthorn cattle. Principal families: Kirklington, Darlington, Strawberry and Victoria. Hired by the Bates bull 34 8544. Stock for sale. Write for prices.

Jerseys.

SMITH BROS. Hogs, Meadow Brook herd of 100 Jerseys. Stock of the highest quality and of the best strains. Boston chickens. Address

W. J. DEAN, Saginaw, Saginaw Co., breeders of the Rhode-Island and Grand Duke. Also bred by the Rhode-Island and Grand Duke. Address

Gallinows.

GALLINAW BROTHERS' ASSOCIATION of the State of Michigan. President, Thos. Wyckoff, Davidsburg, Vice-President, L. R. Towne, Ionia, Secretary and Treasurer, C. T. Wickes, Stanton. Choice recorded stock for sale. Correspondence invited. Address

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Devons.

R. G. HART, Lapeer, breeder of Portershire and Standard-bred Trotting horses; Devon, Galway and Hereford cattle; Merino sheep and Cheviot hogs. All stock registered. Farm and lotting city limits; residence, breeding and sales in the city. Come or write me.

Polled Aberdeen-Angus.

LESLIE & BURWELL, C. C. Craggs Grove, Wis., breeders of pure bred Polled Aberdeen-Angus cattle. Best families represented. All ages and sexes for sale. A no high grades and % for sale. Write for particulars. Address

HORSES.

WATKINS STOCK FARM, Birmingham, Mich., Shetland Ponies, Exmoor Ponies, High class cattle, Holstein cattle, Small Yorkshire swine. Stock for sale. Address

A. WATKINS, 15 McGraw Building, Detroit, Mich.

DIRECTORY OF MICHIGAN BREEDERS

CATTLE—Shorthorns.

A. J. COOK, Owosso, breeder of Shorthorn Cattle, and Shropshire Sheep. Stock for sale. All stock recorded and of popular families. Write to A. J. Cook, Agricultural College, for prices.

ARON P. BLISS, Swan Creek stock farm, A. breeder of thoroughbred Shorthorns. Stock for sale. Correspondence solicited and promptly answered. C. S. Baldwin, Manager, P. O. address, Saginaw, Mich.

D. DEAN, Saginaw, breeder of Shorthorn Cattle, and Shropshire Sheep. Stock for sale. All stock recorded and of popular families. Write to D. Dean, Saginaw, Mich.

P. COOK, Brooklyn, Jackson Co., breeder of Shorthorn Cattle. Good families represented. Correspondence solicited and promptly answered. Choice young bulls for sale. Address

ARTHUR ANDERSON, Montclair, Michigan, breeder of Shorthorn cattle, established with Oxford Count 57263 by imported Wild Major Craggs at head of herd. Correspondence solicited. Address

C. E. WAKEMAN, Pontiac, breeder of Shorthorn cattle, Clydesdale horses, Polaris, Dutch form and Hampshire Down sheep. Stock of each for sale. Correspondence promptly answered. Address

CHARLES FINNBERG, Lakeside Stock Farm, Howell, Livingston Co., breeder of Shorthorn cattle. Hired by Bates bull Barrington Duke 7th No. 7267. Belle Duchesse, Camilla's Victoria, and other families. Young stock for sale. Address

VERGREN HILL STOCK FARM, J. Everett Moore, proprietor, Milford. Shorthorn cattle, Chester White hogs, Merino sheep and Langshires. Stock for sale. Address

F. R. BURNETT & SON, breeders of Shorthorn cattle, Chester White hogs, Merino sheep and Langshires. Stock for sale. Address

F. A. BRADEN, Victoria Stock Farm, Bismark, Saginaw Co., breeder of pure bred Shorthorns of the Victoria and Standard-bred families. All stock recorded. Young stock of both sexes for sale. Correspondence solicited. Address

GEO. A. HART, Lakeside Stock Farm, Montclair, Mich., breeder of Shorthorn cattle. Stock for sale. Correspondence solicited and promptly answered.

G. S. ALLEN & SON, breeders of Fine Shorthorn Cattle, Langshires, Devon, England's Pride. Correspondence solicited. Address

H. HINDS, Stanton, Montclair Co., breeder of Shorthorn Cattle and American Merino Sheep. Address

HENRY BROOKS, Brooks Farm, Wixom, breeder of Shorthorn cattle. The following families represented: Pomona, Rose of Sharon and Phyllis. Correspondence promptly answered. Address

JOHN M. FISHER, proprietor of Maple Hill Stock Farm, breeder of Shorthorn cattle of fine form and excellent pedigree. Principal families: Kirklington, Hutton, Dutchess, Victoria and Pomona; 57th Duke of Hillsdale bull at head of herd. Young stock for sale. P. O. address: residence, five miles southwest. Write for prices. Address

JOHN O. SHARP, "Hillside Farm," Jackson, breeder of Shorthorn cattle. Principal families: Hutton, Young Mary, Polaris, etc., headed by the Bates bull Per Duke 34 8544. Young stock for sale. Correspondence solicited. Address

JOHN MCRAE, Howell, Macomb Co., breeder of Shorthorn cattle. Young bulls and heifers for sale. Correspondence solicited. Address

DAVIDSON TEENESS, Lenawee Co., breeder of Shorthorn cattle. A few choice young females for sale. Also some young bulls. Correspondence will receive prompt attention. Hired by Bates bull Per Duke 34 8544. Address

N. B. HAYES, Eldorado Stock Farm, breeder of Shorthorn cattle. Principal families: Hutton, Young Mary, Polaris, etc., headed by the Bates bull Per Duke 34 8544. Young stock for sale. Correspondence solicited. P. O. address: Mar 10th Co., Ill.

O. SNOW & SON, Kalamazoo, Mich., breeders of Shorthorn cattle. Principal families: Hutton, Young Mary, Polaris, etc., headed by the Bates bull Per Duke 34 8544. Young stock for sale. Correspondence promptly answered. Address

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Polled Aberdeen-Angus.</











How to Raise Swine.

Prof. W. A. Henry, director of the Agricultural Experimental Station, Madison, Wisconsin, says: We have found grade Poland Chinas excellent animals for our experimental work. A sow should not farrow under twelve months of age; fifteen months would be better. If in a building, a sow should have a limited amount of bedding at that time, and fence boards should be placed around the walls six or eight inches from the floor, projecting out, so as to keep the dam from killing the pigs by plucking them between her body and the wall. We now arrange to have our sows farrow in the open field, under some slight protection temporarily erected. We have been unable to get early pigs, and consequently they farrow in the summer time, when almost all are sure to live. The sow should be kept as long as possible, as old sows give better pigs and more milk. Until the time of weaning let the sow have an abundance of nourishing food, using skimmed milk, not using too much Indian corn. Give roots in a clover or pea field. Owing to the difficulty of raising early pigs, we carry the sows over the winter, running them on clover the second summer; but if desirable they can be fattened by August. Hogs cannot be fed profitably in the pen for any length of time, and it is well to keep them in pasture lots as much as possible. Give nutritious foods such as shorts, peas and milk, using enough corn, however, to make the pork solid. If the market demands fat pork, feed more barley or corn. We have not experimented with roots, but are well pleased with clover and pigs. Hogs cannot be fed on clover alone; with it they will make firm, but not fat. Five or six hogs, weighing 125 lbs. each, will run on an acre of clover. Clover being nutritious, Indian corn is an excellent by-feed, and so is ground barley. We generally feed whole grain. Corn, perhaps, would be better ground, but we have sometimes got the best results from feeding corn whole; but much depends on the condition of the animal. Our experience is against cooking feed for the fattening animals. By this is meant all the feed. Probably it will pay to give some cooked food for variety. The general buyer goes by weight only, but there is springing up a demand for smaller hogs not very fat. One local packing establishment pays one cent a pound more than the market price for smaller lean hogs for fancy purposes. The hog has been very profitable with our farmers where care and intelligence have been exercised in the management.

In his annual report for 1888, Prof. Henry says: The writer's experience in hog feeding points plainly to one rule, which he believes can be taken as a standard for the present at least; that is, other things being equal, feed the hogs in such a way as to get them to eat the largest amount in a given time without waste. By following this general rule I think the best results will be attained. In conducting experiments with cooked and uncooked feed it was found that a hog would eat more uncooked feed than cooked, and in these experiments we note that he ate more wet feed than dry feed. Since we desire him to eat the maximum quantity per day, it would seem that in some cases at least wet feed is superior to cooked feed on the one hand, and dry feed on the other. Such questions of how to prepare feed for swine at the present time. How greatly we will modify our views when more experiments have been conducted and our knowledge of the subject has been enlarged it is impossible to say. Swine growing is becoming more difficult because of insidious and wasting contagious diseases that come upon our herds at times. This loss, though severe in localities, is not as discouraging upon the whole as is that prevalent everywhere, due to what may be called the weakened constitution of swine. A large percentage of our pigs die at birth, and many more are lost before they reach a profitable age. The situation of affairs approximates that of a calamity to our agricultural interests, for under favorable conditions of production and sale, no line of farming offers a fairer percentage of gain for the capital and time invested than swine raising. While far from wishing to cause undue alarm, it is time we looked the matter squarely in the face and made a careful survey of the situation and an earnest effort to improve conditions. To get better markets and an increased consumption of pork we must have better hogs, and to have better hogs we must have better hogs, which shall be properly fed, and to have them profitable we must have them born with better constitutions.

We go back again to the subject of Indian corn, which is and will continue to be the great hog feed of America. In and of itself Indian corn lacks the muscle-making and bone-producing elements in such a measure that of itself it should not be wholly relied upon for feeding, breeding and growing animals. To such must be fed, it would seem, food that will strengthen the bones and nourish the muscles, and give the internal organs of the body that size which they should attain to serve their proper functions. Our trials, few in number, and not warranting general conclusions, seem to point to the happy fact that no large quantity of feeds rich in ash and nitrogen, such as milk, shorts, bran, clover and peas, are needed to mix with corn to very materially increase the strength giving qualities of that grain. Only those farmers who are blind to results can fail to furnish the proper food materials to their swine. But we have not touched all sides of the subject yet. To win back the consumers we are constantly losing, people who object to greasy pork made from flabby fat animals, we must change our methods of feeding and kinds of feed. The present markets offer little or no extra price for hogs kept in cleanly quarters and supplied with wholesome food of the kinds proper to produce the best pork. This condition must be changed.

Bruised Eye in Colt.

ALBION, N. Y., Jan. 18, 1890.  
Veterinary Editor of the Michigan Farmer.  
Can anything be done for a colt, coming two years old, that has nearly lost the use of one eye? It is a little smaller than the other; the eye looks good except the pupil which is nearly covered with a bluish white. It does not appear to be inflamed, but the head is swollen some over the eye and appears to be tender. Do not know what caused it. I noticed it about three weeks ago.

Probably Indurated Tumor in the Breast of a Horse.

OWAKOON, Jan. 20, 1890.  
Veterinary Editor of the Michigan Farmer.  
I have a horse which has a lump between his forelegs on the breast; was first at first, but is getting hard; saw it first a week ago. It came the size of a hen's egg, but is now as large as a pint basin. Bathed with a liniment of kerosene oil and Spanish fly, but it has done no good. Please answer through the FARMER and oblige.  
GEORGE HILLIKER.

Warts on a Colt's Nose.

HOWELL, Jan. 21, 1890.  
Veterinary Editor of the Michigan Farmer.  
I have a colt nine months old, his nose is covered with warts; some are as large as the head of a tack, and some smaller. What can I do to take them off?  
SUBSCRIBER.

These fungus growths not unfrequently appear about the nose and mouth of young colts.

They are sometimes found in large numbers about the mouth and lips; they are generally rubbed off. Sometimes they become large and deeply rooted. A needle with a strong double thread passed through their centre and tied tightly on either side is efficacious. Thus secured, the warts soon die and drop off. Or they may be destroyed by the application to each wart of the permanganate of potash, or removed by the use of the knife.

Commercial.

DETROIT WHOLESALE MARKET.  
DETROIT, January 25, 1890.  
FLOUR—Market quiet and unchanged. Quotations on car load lots are as follows:  
Michigan roller process, 3.80 @ 3.90  
Minnesota, 3.80 @ 3.90  
Minnesota, 3.80 @ 3.90  
Low grades, 2.25 @ 2.50  
WHEAT—Generally lower than a week ago. Receipts and shipments light, and stocks here decreasing. Quotations in this market are as follows: No. 1 white, 79 1/2c; No. 2 white, 78c; No. 3 white, 77c; No. 4 white, 76c; No. 5 white, 75c; No. 6 white, 74c; No. 7 white, 73c; No. 8 white, 72c; No. 9 white, 71c; No. 10 white, 70c; No. 11 white, 69c; No. 12 white, 68c; No. 13 white, 67c; No. 14 white, 66c; No. 15 white, 65c; No. 16 white, 64c; No. 17 white, 63c; No. 18 white, 62c; No. 19 white, 61c; No. 20 white, 60c; No. 21 white, 59c; No. 22 white, 58c; No. 23 white, 57c; No. 24 white, 56c; No. 25 white, 55c; No. 26 white, 54c; No. 27 white, 53c; No. 28 white, 52c; No. 29 white, 51c; No. 30 white, 50c; No. 31 white, 49c; No. 32 white, 48c; No. 33 white, 47c; No. 34 white, 46c; No. 35 white, 45c; No. 36 white, 44c; No. 37 white, 43c; No. 38 white, 42c; No. 39 white, 41c; No. 40 white, 40c; No. 41 white, 39c; No. 42 white, 38c; No. 43 white, 37c; No. 44 white, 36c; No. 45 white, 35c; No. 46 white, 34c; No. 47 white, 33c; No. 48 white, 32c; No. 49 white, 31c; No. 50 white, 30c; No. 51 white, 29c; No. 52 white, 28c; No. 53 white, 27c; No. 54 white, 26c; No. 55 white, 25c; No. 56 white, 24c; No. 57 white, 23c; No. 58 white, 22c; No. 59 white, 21c; No. 60 white, 20c; No. 61 white, 19c; No. 62 white, 18c; No. 63 white, 17c; No. 64 white, 16c; No. 65 white, 15c; No. 66 white, 14c; No. 67 white, 13c; No. 68 white, 12c; No. 69 white, 11c; No. 70 white, 10c; No. 71 white, 9c; No. 72 white, 8c; No. 73 white, 7c; No. 74 white, 6c; No. 75 white, 5c; No. 76 white, 4c; No. 77 white, 3c; No. 78 white, 2c; No. 79 white, 1c; No. 80 white, 0c; No. 81 white, -1c; No. 82 white, -2c; No. 83 white, -3c; No. 84 white, -4c; No. 85 white, -5c; No. 86 white, -6c; No. 87 white, -7c; No. 88 white, -8c; No. 89 white, -9c; No. 90 white, -10c; No. 91 white, -11c; No. 92 white, -12c; No. 93 white, -13c; No. 94 white, -14c; No. 95 white, -15c; No. 96 white, -16c; No. 97 white, -17c; No. 98 white, -18c; No. 99 white, -19c; No. 100 white, -20c; No. 101 white, -21c; No. 102 white, -22c; No. 103 white, -23c; No. 104 white, -24c; 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